

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Steven Wilson <randyw@crl.com>
Subject: [5021] 40673 Any modern day versions
Message-ID: <Pine.SUN.3.91.960301092026.16689B-100000@crl14.crl.com>

The 40673 was a neat IC and fun to work with on small portable receivers. Does anyone know of a modern day version of this part that is currently being mfr by one of the major semi conductor houses ?

Thanks,

de stan ak0b
e-mail via randyw@crl.com

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: bfollett@ditell.com
Subject: [5047] 49er/Altroids--What have we started?
Message-ID: <199603020113.SAA12075@orion.ditell.com>

Gang:

The original intent of the 49er seemed simple enough. Something new for Dayton that didn't require hunting for parts at the flea market.

What happened? Enough folk got frustrated chasing parts that Doug and Jim made a decision for an, almost instant, NorCal kit. At the price of \$25, and substantially better performance than the Pixie, thanks to Wayne, we now have a cheap rig that could be used for almost anything, including future, one-design contests.

Too bad Chuck is on the road, he could weigh in with some contest rules and be nit-picked for the next couple months. Anyone else want to jump into the void? (wire antennas only? ground conductivity? batt. voltage? allowable modifications?---ahhh, the problems of one-design competition).

Anyway, its now gone too far! I never heard of Altroids before, and now, THE Maggie Thatcher is visiting my local supermarket this Sunday, promoting UK products, and Altroids are on special sale 2 for \$3. Where will it end?

I bet Scotland Yard won't let me get close enough to get an autographed Altroid box...Now would that be as worthy as a Demaw built QRP rig?

BTW, we have drained Mouser of vari-caps for the 49er....oh well.

73, Bob

Bob Follett WA7FCU, QRP-L # 129, NorCal, ARCI, 10-10
2861 Estates Dr. VOICE: 801.649.6457
Park City, UT 84060 Home Office E-mail: bfollett.ditell.com

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: NYOUNG@nova.wright.edu
Subject: [5048] Altroids box competition bogus nonsense...
Message-ID: <01I1U6A4AVNC94Q2RM@nova.wright.edu>

Ok, here's the deal:

- Rule #1: All solid state components must come from the Ernesto "Che" Guevarra Semiconductor Factory in Santiago de Cuba.
- Rule #2: All other components must come from Radio Shack in their "bargain packs" of hundreds of normally useless capacitors and inductos and resistors +c.
- Rule #3: The whole damn thing must be built in the Altroid box. This means that you must mount the board in the box before putting any components on the board and soldering them into PCB places.
- Rule #4: Your signal from the 49er must be audible at the CETI array outside of Arecibo, Puerto Rico. If your signal is not audible there, you may submit four untouched Puerto Rican "billetes de loteria." Or a copy of the newspaper announcing the death of Adan Garcia.
- Rule #5: All contacts must be verified as flawless CW by two other amateur station operators who are also themselves able to produce flawless CW using two pennies onto which the keying line is soldered.
- Rule #6: Antennas are restricted to no more than 15 meters, loading coil and ground line (if used) included.
- Rule #7: All attestations to the veracity of your meeting the above six rules must be signed by the two hams mentioned above as well as by Fidel Castro. And you must get his signature in person. On the embarcadero in Habana Vieja. With a pen that was used by alien abductors to fill out medical records on your experimental use.
- Rule #8: All forms must be received at Box 88, Moscow, USSR by October 14, 1917.

There. That's reasonable enough, ain't it?

73
Nils
WB8IJN +c

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: "Bill Kelsey - N8ET - Kanga US" <kanga@brutus.bright.net>
Subject: [5050] Blue Rose Electronics
Message-ID: <199603020209.VAA29435@brutus.bright.net>

I have seen several posts the last few days wondering about Blue Rose Electronics. It is my understanding that they are no longer in business.

73
73 - Bill Kelsey - N8ET
Kanga US
kanga@bright.net
419-423-4604
<http://qrp.cc.nd.edu/kanga/>

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Robert Finch <bfinch@asp.vet.purdue.edu>
Subject: [5005] Bravo for Heath
Message-ID: <199603021112.GAA14262@asp.vet.purdue.edu>

two observations:

1-the manuals were very complete, AND DID include theory (someone suggested the theory wasn't)...and the troubleshooting information was second to none on the ham stuff i own (and use every day)
2-i rather have too much information, as u never know when it will be relevant to you....replacing the finals in my sb104 whud have been longer and more confusing without the exploded mechanical info and drawings in the assembly manual

and i'm no novice when it comes to the workings of this stuff ...i earned (and still do from time to time) my living for many years repairing communications electronics....i ALWAYS appreciate the better manuals like amplex, tek, and HEATH

72's
baab,n6cxb

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996

From: flanders@GroupZ.net (Jerry Flanders)
Subject: [5029] BUTTERNUT OR GAP? HELP FOR N2VPK
Message-ID: <199603011910.0AA63078@nss2.CC.Lehigh.EDU>

I have installed a BUTTERNUT HF6V-X with the (CPK or CPX?) counterpoise. Up about 30 feet ...

.. Well, with the help of my 6'2" son, we got it up abt. 30 feet.

.. again...what do you know... OUT of tune. I won't go on any longer with this part, but after much trail and error. I did get it to meet their published spec.s . But... BUT..think about what I went through!!!!. And those LITTLE things that can turn a customer OFF quickly.

All the tuning problems might be avoided if ...

1. You ground mount the HF6v/9V-X (no guarentees from me)
2. Buy a GAP,R7 or make your own antenna

This only reflects my personnal experience and opinion

de RICH

=====

Rich et al,

I have a ground-mounted HF6V with 160 meter band add-on. It has been up now for 13-15 years. I simply put it up in accordance with the instructions, added a few square feet of ground screen below it (fence wire fabric) and 4 radials, and have been using it (on CW freqs) without any problems ever since.

I put it up before I put up dipoles in my pine trees. It is now my secondary antenna, usually connected to a receiver for just monitoring the bands.

I will occasionally have to put it back into transmit service when I discover a fault in a dipole somewhere, and it ALWAYS performs. It has never failed to do it's job, even when the dipole doesn't.

Often, I will copy a signal simultaneously on the HF6V (with a Kenwood R599D receiver) and a dipole at 50 feet on my ICOM 751. Sometimes the vertical has the stronger sig, but usually the dipole does, but not by much.

I have gotten more out of the HF6V antenna for the money and labor invested in putting it up and maintaining it than any other antenna I have ever used.

I think that if I could have only ONE HF antenna, the HF6V with radials would probably be my choice. No kidding!

It keeps going, and going, and

If anyone is interested, we could arrange for some on-air A/B tests.

Jerry W4UKU South Carolina flanders@groupz.net

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: vhatley@usa.pipeline.com (Vernon Hatley)
Subject: [5028] Butternut vertical
Message-ID: <9603011851.AA02763@pipe6>

Rich,

Sorry you had so much trouble with your HF-6. I bought one back in November from AES and have had nothing but good luck with mine. Several of the HAMS around here have been so impressed that they changed their usual "vertical hating" attitude to actually buying one. My HF-6 IS ground mounted with 4 resonant radials for each band; 24 total. I have had none of the problems you mentioned. Butternut does make it clear in their literature that you will NOT get the performance they advertise if you use a counterpoise instead of radials. My only complaint is a narrow band width on 80 meter; only about 30 khz. On 40 meter I get about 200 khz; all the other bands I get full end to end coverage. I tuned mine with a MFJ analyzer and had it tuned in about 30 minutes. Haven't touched it since.

Is it the ultimate antenna; NO. Is it as good as a beam; NO. When I began looking for an antenna I had several requirements:

- a) as much band coverage as I could get.
- b) as many bands as I could get.
- c) no traps
- d) most important; price

I am a farmer here and have plenty of room for a big antenna farm; but unfortunately, I don't have the finances to have several towers with beams strung all over them. So I was wanting the most antenna for my buck. The price I paid for my HF-6 was \$199; 6 bands, good band width, nice performance. It met the bill. I believe that the GAP verticals are price significantly more than \$199 as is the R-7. Plus the R-7 does NOT have any 80 meter coverage. Of all the other vertical antenna manufactures out there the GAP is the only other one I would consider; mainly the Titan DX.

I would recommend that anyone wanting a vertical antenna read the vertical antenna section in the ARRL Antenna Handbook. Then read the advertisements from the vertical antenna companies. Much of what the manufactures say in their ads is pure fantasy. ;-)

--

KK5RO
Vernon A. Hatley

OHR Explorer II
Ten Tec Century 21

QRP-L #325 Butternut Vertical
(stuck at 46 states & 37 countries)

--

KK5RO OHR Explorer II
Vernon A. Hatley Ten Tec Century 21
QRP-L #325 Butternut Vertical
(stuck at 46 states & 37 countries)

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: kreinbd@ccgate.dl.nec.com (David Kreinberg)
Subject: [5039] CALLS & GETTYSBURG
Message-ID: <9602018257.AA825721429@smtpgw.ccgate.dl.nec.com>

Folks: This is not QRP related, but you all
might have some answers.

I was asked a question on prodedures about call
sign assignment methods and the "paper trail"
at Gettysburg.

The question involves two different scenerios:

Ham A upgrades and requests a call change on
their 610. This upgrade is filed electronically.

Ham B upgrades and requests a call change on
their 610. This upgrade is filed via snail mail.

Both took the exam on the same day. Also, they
are both in the same call district. We assume that
Ham A's file will get into the FCC's system

quicker than Ham B's file (sorry, this is starting to sound like a Columbo mystery story).

Does anybody know the "inner workings" of the Gettysburg office as far as how they enter this info. in their system, for example, do they enter all the 610 info and process it on a first come basis? If Ham A and B info gets to the FCC on the same day, who would get the first call change, the person who's info is entered into the system first?

I know the electronically filed 610's are processed in about 1 week, but do these get precedence over the "paper" 610's filed via mail? The regular paper 610's are still taking about 3 weeks.

I was asked the application process by Gettysburg the other day by a friend, but found I was guessing on a good part of it. Can anybody fill in the entire "paper trail" from start to finish??

Thanks much.

72/73 de Dave KK5HA

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: af852@rgfn.epcc.Edu (William R Colbert)
Subject: [5015] cards
Message-ID: <9603011638.AA17400@rgfn.epcc.Edu>

Tim, for your cards you might check at the computer or business supply store for Avery #4167. Listed as dot matrix post cards, designed for pin drive, 500 to a box. 3 1/2 x 6 inch size and work well. I also use them for QSL cards. Hope this helps. got mine at Best Buy, but Computer City and others also carry them. 72/73 Ray

--

Ray Colbert, W5XE/V31XE, El Paso, Tx

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: AlexQRP@aol.com
Subject: [5054] Ceramic trimmers,N2G0

Message-ID: <960301230409_235639897@emout07.mail.aol.com>

Jim I've got 12 ceramic trimmers that you are welcome to, they have a range of 7 to 35pf. if you care to have these let me know and I will mail them to you Monday. NO charge to you,,,,A FREEBIE !!!!! Alex WA5UNY Dallas

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: KC5GXL@pnx.com
Subject: [5002] F.I.S.T.S. #
Message-ID: <199603010637.BAA34622@nss2.CC.Lehigh.EDU>

Good question, Tim.
My fists # is 1572
73 es cul de kc5gxl

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: ALK0FRP@aol.com
Subject: [5051] Final CQC QRP score
Message-ID: <960301221933_435972475@emout09.mail.aol.com>

Just got the logs done. next time i'll use AA0XI's logger program.

20 m 38 q's 28 non 10 cqc 17 spc 17 names
172 qso pts 49, 708 20m pts 2 hours

40 m 93 q's 74 non 19cqc 36 spc 18 names
410 qso pts 265,680 40m pts 3 hours

80 m 20 q's 10 non 10 cqc 10 spc 10 names
100 qso pts 10,000 80m pts 1 hour

multiband 20/40/80

151 q's 112 non 39 cqc 682 qso pts 63 combined spc 19 total names

816,354 total pts 6 hours
Rig OHR classic First 20 min the TS850 after
4 el 20m 82 ft, 2 el 40m 70 ft, 2 el phased full loops east\west 70 ft apex
A1 lon a 110 x 100 city lot NO TVI and very low noise level.

Rich W0HEP said next cqc contest I will have run a 1 watt xtal controlled

DCreceiver
and a trap vertical.

Al K0FRP
DIT DIT

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Marshall Emm <75230.1405@compuserve.com>
Subject: [5046] FISTS email address
Message-ID: <960302002239_75230.1405_HHB41-4@CompuServe.COM>

Email address for FISTS was listed incorrectly posted

For FISTS info e-mail to 73631.3654@compuserve.com

73/72
Marshall
AA0XI/VK5FN

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Nick Franco <kf2ph@bnl.gov>
Subject: [5037] FS - HW-8, etc. sniffle!
Message-ID: <3137643C.D59@bnl.gov>

Hi gang,

I've had my HW-8 since before I knew QRP was a specialty area. I just thought it was a cool camping rig. It's been to Boy Scout summer camp and out in the field just for fun. I also use it in my car for mobile QRP back and forth to work and other places. You can see a picture of the mobile set up if you go to the Amateur Radio link from my home page.

I need a dual band HT or something. I have no 440 MHz access and as the president of a club with a 440 machine I want to both chat on it and also work on the controller remotely. This is the only reason I have decided to part with the HW-8. Because of this QRP-L group I have begun building various kits and projects and so I now have a collection of small light travel qrp rigs to take camping, etc.

The HW-8 is an original 4 band version (no band mods). I added a simple S meter circuit for the existing meter and changed the toroids for 40

meters as the originals were saturated and no longer put out anything on that band. I also replaced the antenna jack (RCA) with a BNC jack. I only used the rig on 40 meters and maybe a couple of QSO's on 80. My new NW8020 will pick up where the HW-8 left off when I finish building it. I have a copy of the original manual with all the schematics and diagrams in tact. I also have an additional HW-8 which I bought for parts which is not working at all (just good for spare parts) I'm including in on the deal. I did rip out the 4-band push button switch from the spare rig for one of the QRP-L members so he could get his HW-8 on the air.

I would like to get \$150.00 for the whole shootin' match plus maybe \$10.00 or shipping (I think that should cover it in the main 48).

Let me know what you guys think.

I also have a RS HTX-202 2 meter HT which I won't need if I can get a dual bander. So, I'll sell that too for \$100.00. I have the docs and original box, battery, charger, and rubber duck antenna. It also served me well for the last 3 years and never gave me any grief. I get compliments on the audio quality and strength into our local repeater. It was \$259.00 new but I know they've come down in price at RS since then.

I guess I would be willing to swap for a dual band HT if you have one laying around, depending on the condx, etc. I'm planning on buying a close out ICOM W21AT for \$300.00 - so you all know what I'm shootin' for. Thanks for your support and patience reading this.

72 all,
Nick

--

Nicholas J. Franco <>< BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project - Building 1005 - Room 201
Tel: (516) 344-5467 Fax: (516) 344-3674 UPTON, N.Y. 11973-5000
Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: Nick Franco <nickf@bnl.gov>
Subject: [5040] FS - HW-8, etc. sniffle!]
Message-ID: <9603012129.AA26329@bnlux1.bnl.gov.bnl.gov>

Tried to post this twice via Netscape 2.0 mailer and it never gets to the QRP-L listserv machine, or gets there and dumps. Hopefully, you won't see dups.

Hi gang,

I've had my HW-8 since before I knew QRP was a specialty area. I just thought it was a cool camping rig. It's been to Boy Scout summer camp and out in the field just for fun. I also use it in my car for mobile QRP back and forth to work and other places. You can see a picture of the mobile set up if you go to the Amateur Radio link from my home page.

I need a dual band HT or something. I have no 440 MHz access and as the president of a club with a 440 machine I want to both chat on it and also work on the controller remotely. This is the only reason I have decided to part with the HW-8. Because of this QRP-L group I have begun building various kits and projects and so I now have a collection of small light travel qrp rigs to take camping, etc.

The HW-8 is an original 4 band version (no band mods). I added a simple S meter circuit for the existing meter and changed the toroids for 40 meters as the originals were saturated and no longer put out anything on that band. I also replaced the antenna jack (RCA) with a BNC jack. I only used the rig on 40 meters and maybe a couple of QSO's on 80. My new NW8020 will pick up where the HW-8 left off when I finish building it. I have a copy of the original manual with all the schematics and diagrams in tact. I also have an additional HW-8 which I bought for parts which is not working at all (just good for spare parts) I'm including in on the deal. I did rip out the 4-band push button switch from the spare rig for one of the QRP-L members so he could get his HW-8 on the air.

I would like to get \$150.00 for the whole shootin' match plus maybe \$10.00 or shipping (I think that should cover it in the main 48).

Let me know what you guys think.

I also have a RS HTX-202 2 meter HT which I won't need if I can get a dual bander. So, I'll sell that too for \$100.00. I have the docs and original box, battery, charger, and rubber duck antenna. It also served me well for the last 3 years and never gave me any grief. I get compliments on the audio quality and strenght into our local repeater. It was \$259.00 new but I know they've come down in price at RS since then.

I guess I would be willing to swap for a dual band HT if you have one laying around, depending on the condx, etc. I'm planning on buying a close out ICOM W21AT for \$300.00 - so you all know what I'm shootin' for. Thanks for your support and patience reading this.

72 all,
Nick

--

Nicholas J. Franco <>< BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project - Building 1005 - Room 201
Tel: (516) 344-5467 Fax: (516) 344-3674 UPTON, N.Y. 11973-5000
Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

Nicholas J. Franco <>< BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist Building 1005 Room 201
Tel: (516) 344-5467 UPTON, N.Y. 11973-5000
Fax: (516) 344-3674 Ham Call: KF2PH NE-QRP#349 QRP-L#13
Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Mel Evans <101366.3072@compuserve.com>
Subject: [5035] Heath demise debate
Message-ID: <960301194132_101366.3072_JHP41-1@CompuServe.COM>

Hi gang,

Tonight the figures are 94 to 3 in favour of better kit documents.

One or two have asked about the dealer where I have got my HW9 kit. Sorry, but this is the very last one they have. For interest and possible future reference, they do have fair quantities of HW7 and HW8 spares, plus they are still the UK distributors for the Educational product lines.

Cedar Electronics
12 Isbourne Way
Broadway Road
Winchcombe
Cheltenham, GLOS. GL 54 5 NS
England, UK

Usual disclaimers, but they have a friendly ham on staff, name of Ian Bassett Smith, and he knows his stuff too!

72 and 73 de Mel
GM6JAG
Edinburgh, Scotland.

"If cars were sold like software, would Ford 95 come with only three wheels and a promise of the fourth one sometime next year when they managed to get it round enough?"

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: bmitchel@kodak.com (Brad Mitchell)
Subject: [5006] Heathkit Demise
Message-ID: <9603011226.AA15172@iiatasun.cba.Kodak.COM>

I think in regards to qrp there was no effect.
In regards to kits in general , it was very negative, but inevitable. For instance, where can you now find a kit color TV.. for that matter where can you find an American made TV.

I personally built an oscilloscope, the HD1410 iambic keyer, A crystal callibrator, the DX60-B and HG-10B VFO.

For introduction to electronics, Heath was an ICON, and will never be replaced. Because few people have the time to do things like this anymore. (Probably because most households have 2 incomes, but that is another topic). Someone mentioned that they were advertised in a lot of different magazines. How do you think I got exposed? Probably reading my dad's popular mechanics mag. Or maybe at the Barber shop , reading whatever I could when I was a kid.... Now tell me, and this isn't a slam against anybody in particular, but is for instance Wilderness radio, or Kanga, or even T Kits going to have the same exposure? NOPE.

I guess reading the 78 to 2 in favor of Heath's demise being a good thing must mean that I'm becoming an old fart, and there are fewer and fewer people around that realize the impact that Heathkit had on the general populus.

That suspicion was also verified earlier when we discussed kits not being homebrew. It's apparant that my definitions and standards are being erroded by the masses that are younger than I.

Just remember history repeats itself.

es 73 Brad WB8YGG

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: RobCap@aol.com
Subject: [5016] HW-9 vs. OHR-400
Message-ID: <960301114803_157419590@emout09.mail.aol.com>

Hi folks-

A few days ago I compared the parts count of the OHR-400 vs. the HW-9 (421 parts on the OHR, while the HW-9 has 581).

Well, last night I spent my third night on the HW-9 T/R board, and have paid some serious jumper wire dues, about 20 on the board! These have to be meticulously measured and cut, so that the wire above the very dense board is all coated, and so the wire is flat to the board.

These details, along with far greater mechanical complexity, add up to the HW-9 being a much tougher kit.

Six nights into the kit, am 50% through the second board, while the OHR-400 was completed in about the same time.

73,

Rob

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: nf0r@slacc.com
Subject: [5053] Icom 751A on QRP?
Message-ID: <9603012107.D8778vn@slacc.com>

I've got a chance to pick-up a pretty decent Icom 751A at a fair price.

Wondering if any users would offer some general comments on the xcvr's overall performance as well as its suitability for QRP work?

This has always been one of my dream rigs and still kicking myself for not buying one when they were being closed-out. But, want to be sure!

Your advice and counsel will be sincerely appreciated.

73 de Dave, NF0R nf0r@slacc.com

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996

From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [5012] If you have e-mail problems...
Message-ID: <96Mar1.104737est.57461-14900+42@hooch.CC.Lehigh.EDU>

Gang,

Please check out your local systems before looking elsewhere for problems.

73
Jim N3VXI

Forwarded message:

>From Mailer-daemon@aol.com Fri Mar 1 00:26:57 1996
Date: Fri, 1 Mar 1996 00:26:50 -0500
Message-Id: <199603010526.AAA08110@emin05.mail.aol.com>
From: Mailer-daemon@aol.com
Subject: Returned Mail: Undeliverable
To: lujce@hooch.CC.Lehigh.EDU

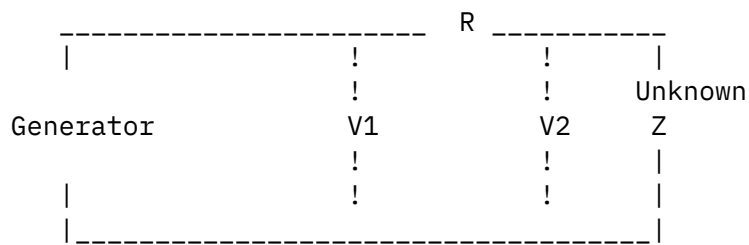
The mail you sent could not be delivered to:
552 ac6ja@aol.com has a full mailbox

The text you sent follows:

>From lujce@hooch.CC.Lehigh.EDU Fri Mar 1 00:26:28 1996
Return-Path: lujce@hooch.CC.Lehigh.EDU
Received: from hooch.CC.Lehigh.EDU (hooch.CC.Lehigh.EDU [128.180.3.11]) by
emin05.mail.aol.com (8.6.12/8.6.12) with ESMTP id AAA07987 for <AC6JA@aol.com>;
Fri, 1 Mar 1996 00:26:27 -0500
Received: by hooch.CC.Lehigh.EDU id <57461-11573>; Fri, 1 Mar 1996 00:26:24 EST
Subject: Re: help
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Goran Hosinsky <hosinsky@royac.iac.es>
Subject: [5003] measure r+jx
Message-ID: <9603010932.AA08983@royac8.royac.iac.es>

Hello Gang,

To do reasonable accurate measurements of $r+jx$, for example
to find out about you antenna, seems to be nearly impossible
without specialized laboratory equipment. Would it be
possible to do it using a two channel oscilloscope and two
probes like this:



You would get information on voltage, current and phase for the unknown Z and so be able to calculate $r+jx$.

Do I miss some important error sources or other problems?

I know, a 2 channel oscilloscope with two probes is also an expensive laboratory instrument but probably a lot easier to get hold of than an impedance bridge or vector voltmeter. Even here at the solar observatory we have two usable oscilloscopes. Also, should be ok with not very good oscilloscopes as you can switch channel and probes and the measurements are relative to each other, not absolute.

73

Goran ea8yu hosinsky@royac.iac.es

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
 From: "evans ken" <evans.ken@wgs-2.bwi.bls.com>
 Subject: [5007] NE 40-40 FS
 Message-ID: <n1386451827.50004@wgs-2.bwi.bls.com>

I have to admit that I have too many projects in the fire. A half completed WM-1, a St Louis Tuner on the way, and a small indoor loop with tuner 1/4 complete. With Dayton looming, I know I'll return with more stuff to build. So, I'm admitting defeat in regards to an NE 40-40. It was purchased at Dayton last year for \$50.00. It is the board, components and manual (no enclosure and you add POTS etc>). First \$50.00 will have it shipped to you.

72/3,
 Ken KJ4XR
 evans.ken@bwi.bls.com

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: "W.G. Moneysmith" <wgm@sma.com>
Subject: [5031] New E-MAIL ADDRESS
Message-ID: <199603011423.0AA18681@ba.com>

To ALL:

My E-Mail address is changing on 3/1/96 to: wgm@mnsinc.com
73s
Bill Moneysmith, W4NFR
-end-

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Doug Hendricks <ki6ds@teles.org>
Subject: [4998] New email address for Doug Hendricks
Message-ID: <31368250.7C5@teles.org>

I have a new email address. It is:
ki6ds@telis.org

I will keep the other one dh@reddog.csustan.edu for about a month
but this is the one that I will be using mainly from now on.

Thanks and 72.

Doug, KI6DS

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: EUS.EUSGFS@memo.ericsson.se
Subject: [5008] OHR400
Message-ID: <B2rUsCIY4mAamNAM*@MHS>

Hi Mike,

The AGC in my 400 is also somewhat stubborn to kick in. There have been a couple of modifications to the AGC circuit that I have seen on the net. I haven't tried one yet but I will be digging into the 400 this weekend=to
'do the mod'.

My 400 does have some drift during warm-up. Let me know if you get this

corrected.

The filter is very tight indeed. The audio seems higher when the filter is in the NARROW position. Have you noticed this?

I did a side by side comparison with my Kenwood 930 (the back-up to the OHR) and found the sensitivity to be just as good (if not a hair better) with the 400. During the 40m WA3NNA beacon, I was able to copy down = 200uw with the 400!!

The 400 is a great radio!

Frank Styron
N4EKP

Work Email:
eus.eusgfs\memo.ericsson.se

Home Email:
n4ekp\amsat.org

Now that I've been using my OHR400 more, I've noticed some things about it.

When does the AGC kick in? I've had my ears blown out a few times while tuning around.

I've replaced the trimcap C134 with the new one sent by Dick, but I still get some warm up drift. Anyone else?

What a great filter! My FT890 doesn't come close to this kind of tight.

It sure is nice having that TUNE/OPERATE switch right up front.

=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=

=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D
7.3 de Michael AA0UB miker=C9cc.com michael=C9frii.com
http://www.frii.com/=FCmichael
QRP-L =C4126 Norcal =C4857 CQC =C4180
=3D-=3D
=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D-=3D

RFC-822-headers:

Received: from mr1.exu.ericsson.se (mr1.exu.ericsson.se)
by edt.ericsson.se (PMDF V5.0-5 =C413379)
id <01I1T1ADI9XS973TPL=C9edt.ericsson.se> for eus.eusgfs=C9memo40.er=
icsson.se;
Fri, 01 Mar 1996 01:16:48 +0100
Received: from gwa.ericsson.com (gwa.exu.ericsson.se =C4138.85.147.13=
=C5)
by mr1.exu.ericsson.se (8.7.1/NAHUB-MR1.1) with ESMTP id SAA08009 fo=
r
<eus.eusgfs=C9memo.ericsson.se>; Thu, 29 Feb 1996 18:19:23 -0600 (CS=
T)
Received: from fidoii.CC.Lehigh.EDU (fidoii.CC.Lehigh.EDU =C4128.180.=
1.4=C5)
by gwa.ericsson.com (8.7.1/8.7.1) with ESMTP id SAA21231 for
<eus.eusgfs=C9memo.ericsson.se>; Thu, 29 Feb 1996 18:19:21 -0600 (CS=
T)
Received: from fidoii.cc.lehigh.edu (=C4127.0.0.1=C5) by fidoii.cc.le=
high.edu w
ith
SMTP id <39538-50826>; Thu, 29 Feb 1996 19:15:20 -0500 (EST)
Precedence: bulk
Originator: qrp-l=C9lehigh.edu
X-Comment: Low Power Amateur Radio Discussion
X-Listprocessor-version: 6.0c -- ListProcessor by Anastasios Kotsikon=
as

Distribution List:

qrp-l..lehigh.edu..INET..EDS05..FREEFORM=3DMultiple__recipients__of=
__list

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: Nick Franco <kf2ph@bnl.gov>
Subject: [5043] Pixie Come Through Again
Message-ID: <313774D1.69F7@bnl.gov>

Hi all,

First, I'm sorry about the dup of my other message. I finally saw one of my Netscape mail messages on this list so it works fine. I guess I was just impatient.

I got on the air with my Pixie2 last night for the Colorburst night and hook a nice QSO with "Bud"-KX3J in Maryland on the first attempt. I think the Colorburst night already ended when I finally got on the air but it was fun anyway. That little rig always amazes me. I've seen a couple of recent posts about the Pixie and figured a QSO report here or there would be encouraging.

72 es have a nice weekend,
Nick

--

Nicholas J. Franco <>> BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project - Building 1005 - Room 201
Tel: (516) 344-5467 Fax: (516) 344-3674 UPTON, N.Y. 11973-5000
Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Marshall Emm <75230.1405@compuserve.com>
Subject: [5025] QSL BURO - FISTS
Message-ID: <960301181837_75230.1405_HHB62-1@CompuServe.COM>

FISTS has a QSO bureau, and since most QRP ops are CW ops, and FISTS is a worthwhile org dedicated to the preservation of Morse, it's an option you might consider. Membership is \$15 per year and there is a monthly newsletter, well worth reading.

The buro evidently works-- I do most of my QSLs direct at postcard rates, but last week I received a message out of the national traffic net that I have cards waiting for me at the FISTS buro!

I'm just not sure if it's for member-member contacts only, but it's worth checking out.

For more info about FISTS, you can e-mail Nancy Kott WZ8C at 7631.3654@compuserve.com and tell her I sent you

73/72
Marshall
AA0XI/VK5FN

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: "rohre" <rohre@arlut.utexas.edu> (by way of ae4ic@nr.infi.net (BOB KELLOGG))
Subject: [5044] RF chokes
Message-ID: <199603012237.RAA30777@mh004.infi.net>

Now here is a new thread.

I have been revisting the areas of component selection, for building from scratch. There seems to be a variety of opinion on what an RF choke is supposed to be, from the standpoint of it being a coil.

I have not been able to buy Haywards book yet,(they were out of stock when I called) so does anyone have his "RF Design" and what does it say if anything about how to design RF Chokes?

Hayward's index doesn't have an entry for choke, RF choke or coil. Evidently, what you are talking about affected the L/C relationship when I was trying to bend the crystal on my NW8020. I didn't calculate the reactances, but I replaced a lot of capacitance (75pf) with a little inductance (6uh).

CUL,

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: torell@sicom.com (Kent Torell)
Subject: [5045] solar forecast
Message-ID: <v02130504ad5d3b966b77@[192.91.202.41]>

The old information hiway is clogged on friday; I haven't received the Canadian forecast yet. Excerpts from the somewhat cryptic USAF forecast follow. Looks like a great weekend (relatively speaking ;-).

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
SDF NUMBER 061 ISSUED AT 2200Z ON 01 MAR 1996
IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/2100Z TO 01/2100Z: SOLAR ACTIVITY WAS VERY LOW. THERE WERE NO SPOTTED REGIONS AND THE REMAINDER OF THE DISK AND LIMBS WERE QUIET.
IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE

VERY LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 29/2100Z TO 01/2100Z:
THE GEOMAGNETIC FIELD HAS BEEN AT MOSTLY QUIET LEVELS
FOR THE PAST 24 HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
EXPECTED TO REMAIN QUIET.

IV. PENTICTON 10.7 CM FLUX

OBSERVED 01 MAR 072

PREDICTED 02 MAR-04 MAR 070/070/070

90 DAY MEAN 01 MAR 073

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 29 FEB 006/006

ESTIMATED AFR/AP 01 MAR 006/006

PREDICTED AFR/AP 02 MAR-04 MAR 005/005-005/005-005/005

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: KFGlynn@aol.com
Subject: [5010] St Louis Tuner
Message-ID: <960301101007_157371982@emout05.mail.aol.com>

Hello gang,

Any word on delivery?

Tnx

73 Kevin KB2TE0

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Larry East <LVE1@inel.gov>
Subject: [5013] Test Messages
Message-ID: <2.2.16.19960301160423.151fa7c6@garnet.inel.gov>

Hay folks, if you want to test your network connection, PLEASE don't do it
by sending "test messages" to the list reflector! I just plowed thru about a
zillion such messages in yesterday's digest -- even worse than all the
"sloppy CW" and "gee HeathKit was great" messages...

Seems like many of the messages were the same, so maybe something is amiss with the reflector as well. Ain't modern technology great -- garbage can now be sent to millions simultaneously all around the world!

72 from grumpy 'ol Larry.

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: RobCap@aol.com
Subject: [5018] Unbuilt Heath Speaker
Message-ID: <960301115314_157422107@mail06.mail.aol.com>

Bill-

So tell me, what are you going to do with the unbuilt Heathkit speaker that I sold you?

- a) Build it?
- b) Open the box, but leave it unbuilt?
- c) Keep the box sealed?

It's most valuable if you leave the box sealed. But for all you know, then, it could be a sealed six-pack of Budweiser! What if I sent you a case of Snapple? Aren't you dying of curiosity?

Look on the bright side. It's probably too light to be a six-pack of Bud.

73,

Rob

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: af852@rgfn.epcc.Edu (William R Colbert)
Subject: [5011] upgrade
Message-ID: <9603011527.AA27943@rgfn.epcc.Edu>

Don't remember seeing any mention in my last few digests, but I noticed yesterday that Charles, KC5SNU is now /AE - CONGRATULATIONS Charles and again welcome back. 72/73 Ray

--

Ray Colbert, W5XE/V31XE, El Paso, Tx

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Tony Lyon <tonyl@ibmoto.com>
Subject: [5030] WTB: HW9 Accesories....
Message-ID: <199603011844.MAA16203@chuys.ibmoto.com>

Greetings,
I'm looking for the following HW9 accessories:

- a) Tuner
- b) Matching speaker

I already have the HW9 power supply and wattmeter, but I would like to purchase these last 2 accessories either in kit form or already built.

If you either want to sell yours or know somebody that would like to part with them, PLEASE LET ME KNOW!!!!

Thanks,
Tony Lyon (KJ5XF/QRP)

P.S. Please reply directly to: tonyl@ibmoto.com

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: wdzeares@ix.netcom.com (W. Dennis Zeares)
Subject: [5024] www qrp-1
Message-ID: <199603011813.KAA19732@ix15.ix.netcom.com>

Its Friday and the www qrp-1 page has not been updated since Wed. messages. Any one know whats wrong? I hope they get it fixed soon.
72/73 Dennis K3ETS

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Dick G0BPS <Dick@kanga.demon.co.uk>
Subject: [5004] Re: 73 Becoming a QRP mag??

Message-ID: <+w6pzCA5v\$MxEwJj@kanga.demon.co.uk>

In message <2.2.16.19960228160212.1bc799de@garnet.inel.gov>, Larry East <LVE1@inel.gov> writes

>>It looks like the latest issue of 73 holds some interest for QRPers:
>>There's a nice little roundup of QRP kits, a KC1 review by AC4HF, A
>>review of the new QRP+ by none other than WA3ULH, plus more. A pretty
>>good issue.

>>

>Gee, folks; if Uncle Wayne thinks QRP is a good thing, maybe we are doing
>something wrong!! :-) :-)

>

>Sorry all you [3 or 4] Wayne Greene fans out there, just kidding! (NOT)

>

>72, Larry.

>

>

You mean to say that 'uncle Wayne' has as many as 3 fans !!!

We even know him over here...

TTFN de Dick (QRP-L 206)

Dick Pascoe G0BPS / G0ROO KANGA PRODUCTS
The UK's Leading supplier of QRP kits.
Email to: Dick@kanga.demon.co.uk

Home page: <http://ukinternet.com/ham/kanga>

All comments made here are permitted
and condoned by the boss
I AM THE BOSS!

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: bobhigh@primenet.com (Bob Hightower)
Subject: [5052] Re: Altroids box competition bogus nonsense...
Message-ID: <199603020339.UAA24442@usr1.primenet.com>

>Ok, here's the deal:

>(long list of rules follows)

>There. That's reasonable enough, ain't it?

>

>73

>Nils

>WB8IJJ +c

>

Shoot! Just when I finished mine (can't be at Dayton, darn it) you tell me the whole thing is so much whooey.

Anyway, the article mentions 'only one simple alignment step', but what the heck is it?

There ain't but three adjustable things in the rig, and one of them is for noise level.

The other two interact to a degree, but I can't get much audio out of them...I can tune

to a freq, and get it peaked to a degree, but that's about it. It does transmit, but

it's obvious that the antenna is the most critical part of the whole ensemble.

I am getting an annoying oscillation from the rig that seems to be local, i.e., it don't go far enough to be carrier noise. Is the VXO that powerful?

Neat little rig, and fun to build. Got it all in the box, and the lid even shuts :).

If anyone has build it and has tips on alignment that I may be missing, please e-mail me direct.

73,

Bob KI7MN NorCal #1228, qrp-ARCI #8918, qrp-l #271

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996

From: femens@iquest.com

Subject: [5042] Re: CALLS & GETTYSBURG

Message-ID: <199603012158.PAA07979@vespucci.iquest.com>

This is not gospel, but it is the way I understand the application handling process. Electronic filings, as long as there are no glitches found in the filing, are processed overnight. I believe the automatic batch process takes place at something like 3 am. Call signs are assigned and the application becomes effective as soon as it appears in the database. Our VEC bunch tries to get the results of an exam session filed on the day of the session (or the day the data arrives at the VEC if it is an out-of-town session.) Our local sessions are Saturday mornings and it is not unusual to have an applicant qualify for a new license or upgrade on Sat am and be able to confirm early Sunday am that it was processed, tell the new licensee that what his or her new call is and confirm that upgrades were processed.

If there are glitches in the filing the application involved goes into a separate queue for manual handling and resolution of the glitch -- sometimes taking weeks to be processed. For example, if an upgrade applicant does not request a change of name or address and the 610 shows a name or address that does not match what's already in the database, that goes into the queue for manual (and slow) resolution.

Mail filings (I think only address changes, name changes, and renewals go by mail any more -- I think all VEC organizations are now set up for electronic filing.) are entered into the database by FCC personnel. I doubt there are able to do the data entry on the day an application is received, so their getting into the system will be delayed at least a day or two after electronic filings

73

Frank Emens, Huntsville Alabama "femens@iquest.com"

"Things are more like they are now than they have ever been before."

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: aa7qy@primenet.com (Roger Hightower)
Subject: [5049] Re: CALLS & GETTYSBURG
Message-ID: <199603020201.TAA26172@usr3.primenet.com>

At 04:29 PM 3/1/96 EST, David Kreinberg wrote:

>
> Folks: This is not QRP related, but you all
> might have some answers.
>
> I was asked a question on prodedures about call
> sign assignment methods and the "paper trail"
> at Gettysburg.
>

I believe the electronic filings are just that...no keystroking involved. As long as the paperwork sent to the VEC was done at a regular test session, it's keystroked at the VEC and then the confusers take over.

OTH, if you send in a 610 via snail mail, it's handled manually to enter into the system. There really is no overlap/interference. Timing is a matter of when it gets there. Electronic filings are usually done on a Thursday, and manuals are done when they get there and when a data entry person is available (not every day, as I recall).

There really should be no difference between ham A and ham B, since you cannot upgrade and submit a 610 except through the VE process. I may

be wrong here, but I think ALL VEC's are using electronic filing. If not, then snail mail comes in. Same as above...if it comes in the mail, it waits for a data entry person, and gets done. Some delay there.

72/73, de Roger AA7QY

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: "N100Q Tom R. @ MR01 01-Mar-1996 1208" <randolph@est.ENET.dec.com>
Subject: [5020] re: DC Power Connectors
Message-ID: <9603011726.AA25957@us4rmc.pko.dec.com>

> The grommets: RS 64-3025, assortment of 35 for \$1.49.

Or, get a bunch of those plastic "strain relief bushings". I got a handful somewhere (probably a flea mkt), and that's what I've been using on all my stuff. These are in two pieces tethered together, and you squeeze them over the power leads to make a combined strain relief & grommet. See pg. 277 of Mouser catalog 584.

> Positive (+) is always on the POINTED side of the connector.
> Male pins in female shell half.
> Female pins in male shell half.
> Male shell (with female pins) on the equipment side, female shell (with male pins) on the supply side.

Yup, this is the DC power connector standard proposed in QST a year or two back, I believe. I've been following it using the 20A connectors. Relatively idiot proof, saves a lot of fuses, and the connector shells lock together. Anybody got Mouser part numbers for them?

Check the package before you buy these from RatShack. I had to return one that had the small pins for the 12A connector in the package with the 20A shell.

=====
Tom Randolph N100Q NE-QRP 419 QRP-L 87 ARRL randolph@est.enet.dec.com
=====

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: dteague@iAmerica.net (Dave Teague)
Subject: [5001] Re: First QRP kit
Message-ID: <199603010529.XAA10871@ns2.iAmerica.net>

>Hello Brian,

>
>I am in the process of making the Oak Hills Research Explorer II for 20
>meters. About half-way there. I have heard nothing but very good reviews
>for this rig. It cost me \$95.

>
>GL 73 Kevin KB2TE0

>
I just finished my Oak Hills Research Explorer II for 40 meters last
Saturday. A few weeks ago I built the OHR WM-1 wattmeter. These kits were
100% complete kits.

These were my first kits ever and had no problem completing either one of
them. Followed instructions and soldered carefully. I am very pleased with
both of these kits. The WM-1 is amazing on the 100 mw low power scale, I
have the ALC mod for my Icom 737A and have made several milliwatt QSO's on
40 and 80 meters. It is very nice to see your exact power output down to 5 mw!

I believe the hardest part of building the Explorer II for me was peaking
the receiver with the 2 tuning pots. The trick for me was to use a
non-conductive tuning tool (a whittled piece of wood) and get a steady tone
to peak on (a few milliwatts from the ICOM). The receiver seems to be about
as good
as my \$1400 ICOM with a 500 hz filter, how is this possible?

Well the QRP bug bit me a while back and now the building bug has bit me.

Dave Teague KF5IU EM31 Jena, LA QRP-L #391 dteague@iamerica.net

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: bmitchel@kodak.com (Brad Mitchell)
Subject: [5032] RE: Heathkit Demise
Message-ID: <9603011748.AA18485@iiatasun.cba.Kodak.COM>

Whoa... It wasn't 78-2 in favor of Heath's demise.. it was 78-2 that said
they wanted better manuals, LIKE HEATH.

>

oops.

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: johnmb <johnmb@nando.net>
Subject: [5027] Re: HW-9 vs. OHR-400
Message-ID: <Pine.SUN.3.91.960301134426.3978C-1000000@bessel.nando.net>

On Fri, 1 Mar 1996 RobCap@aol.com wrote:

>
> Six nights into the kit, am 50% through the second board, while the OHR-400
> was completed in about the same time.
>

Just remember, in kitbuilding, as in life, enjoying the
"journey" should be your goal... not the destination! :-)
/zenmaster john
wb5oau

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Marty Rosenzweig <marty@mht.com>
Subject: [5022] Re: Line isolators for feedlines
Message-ID: <3137425C.2501@mht.com>

rohre wrote:

>
> By the way, as computer networks convert over to fiber optic cable, there is a
> lot of fine coax becoming surplus with shield braid and foil shield in the
> cables of Ethernet type. It is great 50 ohm cable.

> 72, Stuart K5KVH

I recently ordered a little extra RG58A/U ("thinnet" for EtherNet) when I did a LAN upgrade. What came was a grey jacketed RG58 coax and I intended to use it for some short jumpers to a tuner and for QRP work. By chance, however, I was looking through a Cable X-Perts cable catalog and noticed they also sell "thinnet" RG58A/U. Their Coax chart shows RG58A/U rated at 650 watts max at 10 MHz but the "thinnet" version not recommended at all for RF power.

No doubt at certain power levels it's safe (probably QRP) but be aware of this limitation.

This is also true of the very common RG6/U (75 Ohm) used for TV antenna

applications.

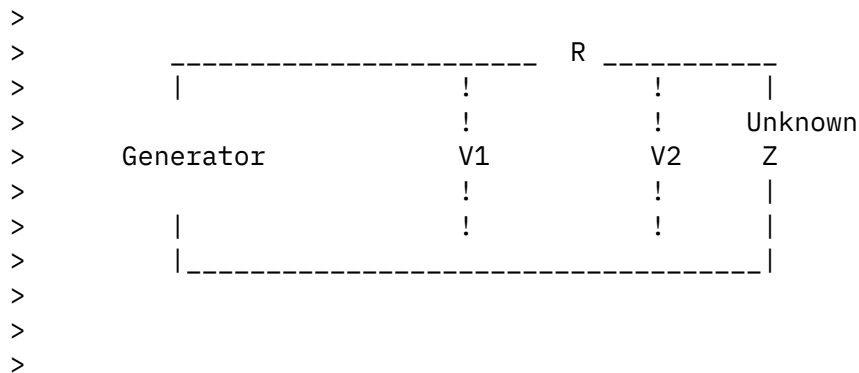
72, Marty, W00Q

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: "Y. Hum" <ab268@freenet.carleton.ca>
Subject: [5023] Re: measure $r+jx$
Message-ID: <2.2.16.19960301174447.08b7113e@44.135.96.33>

At 04:40 AM 3/1/96 EST, you wrote:

>
>
> Hello Gang,
>
> To do reasonable accurate measurements of $r+jx$, for example
> to find out about you antenna, seems to be nearly impossible
> without specialized laboratory equipment. Would it be
> possible to do it using a two channel oscilloscope and two
> probes like this:
>

I consider oscilloscope as specialized laboratory equipment. :-)



I have been measuring $r+jx$ using similar setup as above except
I measure VSWR instead of voltage.

This method was published in QST many years back.

>From memory, the procedure is as followed.

- Measure the VSWR of the unknown load.
- insert a low value resistor in series as above (I use 25 ohms).
- measure the VSWR again.

- plot the measurements on Smith Chart.
- and read the r and x .

The QST article published a lookup table to speed up the process.

BTW, I use a Smith Chart Calculator made by Mr P. Smith's company.
This is my most valuable antenna test equipment.

Ying Hum VA3YH

ab268@freenet.carleton.ca | Ottawa Packet | Finger
va3yh@va3hum.ampr.org | Working Group | ab268@freenet.carleton.ca
yh@torfree.net | | for PGP public Key

<http://www.ncf.carleton.ca/~ab268> |

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: flanders@GroupZ.net (Jerry Flanders)
Subject: [5033] Re: QRP IS fun...!
Message-ID: <199603011937.0AA33438@nss2.CC.Lehigh.EDU>

>Well, it's been a fun AND interesting week. It all started last week (2/22)
>when my wife and I went to the hospital to deliver our third (and last)
>baby(a beautiful 9 lb 4 oz baby girl)....
>

>... I have been on the QRP-L for the last 3 or 4 weeks, I had a HW9 to
sell >and someone recommended I post it here. After receiving some tempting
offers, >and lots of interesting mail, I decided to keep the radio and put
it back on >the air. ...

>Scott, KF2ZW

=====
Congratulations on the new girl, Scott.

I am one of the guys who discussed buying the HW-9 from you back then, and I
might have also recommended you mention it here - don't remember for sure.

Reading these guys/gals thoughts sure is addictive, isn't it? You start out
just trying to sell something and discover what great people these are, and

you get hooked!

Next thing you know, you are trying to get MORE QRP gear instead of selling off the gear you already have!

I found my HW-9 about a hundred miles up the road, and am now in the process of waiting for my KC-1 keyer kit to be delivered. I am setting it up strictly solar-powered and completely independent from the "real" rig with separate paddle and everything.

CU on the bands

Jerry W4UKU South Carolina flanders@groupz.net

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: mjsilva@ix.netcom.com (michael silva)
Subject: [5000] Re: RF chokes
Message-ID: <199603010515.VAA16859@ix9.ix.netcom.com>

Ah, I've had chokes on the mind lately myself (for glowbugging mostly).

There's a certain sense to using a choke above it's parallel (not series) resonant frequency. As long as you're (a) passing DC, and (b) presenting a reactance (whether inductive or capacitive) to "divert" the signal flow, the choke is doing it's job. The advantage I see of using the choke above it's parallel-resonant frequency is that harmonics see a lower load impedance than the fundamental (the choke is acting as a capacitor), rather than a higher impedance which would be the case if the choke was acting as an inductor. Looking in the Mouser catalog I see that 2.5 mH (+-) chokes have a resonant frequency around 1-1.5 MHz, and this value was used in rigs up to 14 MHz and sometimes higher. As for the question of shunting RF into the power supply, it's the magnitude of the impedance that counts, not the sign. A 2.5 mH choke resonating at 1.2 MHz has about 7 pF of shunt capacitance. Looking at the voltage divider formed by 7 pF and a 10,000 pF bypass capacitor shows that not much RF will be getting into the power leads.

Now to a question I posed earlier without much response: What if I wanted to wind said 2.5 mH choke on a (ferrite) toroid? I want the highest 'u' core material I can get by with (fewest turns), but how do the normal core frequency ratings (highest tuned-circuit freq., highest

broadband freq.) relate to using the device as a choke? As an example, if I wanted a choke for 7 MHz, what's the highest 'u' core I can get away with using? Can I use a 75-mix, rated at 10 MHz broadband?

73,
Mike, KK6GM

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: torell@sicom.com (Kent Torell)
Subject: [5014] Re: RF chokes
Message-ID: <v02130501ad5cc95c954b@[192.91.202.41]>

Mike writes:

> Looking in the Mouser
> catalog I see that 2.5 mH (+-) chokes have a resonant frequency around
> 1-1.5 MHz, and this value was used in rigs up to 14 MHz and sometimes
> higher. As for the question of shunting RF into the power supply, it's
> the magnitude of the impedance that counts, not the sign. A 2.5 mH
> choke resonating at 1.2 MHz has about 7 pF of shunt capacitance.
> Looking at the voltage divider formed by 7 pF and a 10,000 pF bypass
> capacitor shows that not much RF will be getting into the power leads.

That's right, within reason. This choke will look like:

Mhz	XL	XC	Z	Angle	
0.5	7,854	45,472	9,494	+90	Ind
1.0	15,708	22,736	50,816	+90	Ind
2.0	31,415	11,368	17,814	-90	Cap
4.0	62,832	5,684	6,249	-90	Cap
8.0	125,663	2,842	2,907	-90	Cap
16.0	251,327	1,420	1,428	-90	Cap

Notice how the parallel resonant circuit peaks it's impedance at resonance. As you go up in frequency, the parasitic capacitance takes over. For broadband circuits, the chokes are often split into a large and small inductor, with a value spread of 10 or 20. The smallest value one is closest to the part you are decoupling. As Mike said, it is the magnitude that counts.

^^^^^^^^

> Now to a question I posed earlier without much response: What if I
> wanted to wind said 2.5 mH choke on a (ferrite) toroid? I want the
> highest 'u' core material I can get by with (fewest turns), but how do
> the normal core frequency ratings (highest tuned-circuit freq., highest
> broadband freq.) relate to using the device as a choke? As an example,

>if I wanted a choke for 7 MHz, what's the highest 'u' core I can get
>away with using? Can I use a 75-mix, rated at 10 MHz broadband?

Yep....just watch for parallel resonance ;-)

72, ab7oa

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: "N100Q Tom R. @ MR01 01-Mar-1996 1303" <randolph@est.ENET.dec.com>
Subject: [5026] re: RF chokes
Message-ID: <9603011832.AA29597@us4rnc.pko.dec.com>

> DeMaw makes the reasonable statement that the Reactance of the
> choke at the band of interest should be 5 to 10 times the impedance of the
> load you are feeding the amplifier into. And I take that to mean "INDUCTIVE

That's the rule of thumb I use. If you're winding an Amidon core, just figure out how many turns using the little formula they give you, and wind it with wire heavy enough to handle the current. Heavier wire also improves the Q due to lower resistive loss, but that's not a big worry for RF chokes, where all you're after is blocking of RF while passing DC.

The only time I take the trouble to wind a choke is when I don't have one in the junk box, or it has to handle big current. With the amount of slop in the rule (5-10x), almost any old choke will do at HF.

I've seen circuits where the idea was to try to resonate the choke with circuit capacitance, but usually the idea behind keeping the inductive X low is to prevent that sort of resonance (big X_L and small X_C [from stray circuit capacitance] = resonance; small X_L and small X_C = resonance at some high freq that we don't care about).

I guess the reason you probably don't see much info in the handbook is that there isn't much more to it, unless you get into those plate chokes for multiband amplifiers that you mentioned...

=====
Tom Randolph N100Q NE-QRP 419 QRP-L 87 ARRL randolph@est.enet.dec.com
=====

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: mack@mails.imed.com
Subject: [5017] Re:SMT
Message-ID: <9602018257.AA825706272@mails.imed.com>

Folks:

One of the best *advantages* of SMT is that you don't need those blasted tiny drill bits that are always breaking. Unfortunately, I need to get some bifocals before I do much more SMT work.

Ray
WD5IFS
mack@mails.imed.com

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Todd Nichols <nichols@rtp.ericsson.se>
Subject: [5009] Re: Surface Mount (again)
Message-ID: <199603011445.JAA09723@sunmgc2.rtp.ericsson.se>

N100Q Tom R. wrote:

> You folks should read the GHz transverter articles in QEX.
I do. I am an RF/microwave engineer by profession; I was blessed enough to have classes and labs in grad school that taught me how to do such design.

> No particular problem here with surface mount, but why bother at HF? The Unfortunately, I doubt that most folks new to construction will start out with a transverter (although the no-tune transverters are great for folks who have bought a 2m HT or mobile rig, because the IF on down is already taken care of). If hams are to get into surface mount, I think there should also be an HF path. Doesn't have to be a radio! (shudder, heresy) Could be a keyer or filter or ... you get the idea.

> pain (in the neck) factor is substantial. For instance, I recently debugged
> a DF circuit I was building by noting that I'd used a 47K resistor in place
> of a 4700 ohm. Good luck with surface mount, where many chip components
> aren't even labeled! Lift one lead of every resistor and measure? Good luck
> again!

I made the point earlier that one has to take more care in packaging and storing SMT than thru-hole components. And, having faced just this little problem in the lab, I have two comments: 1) test points in the circuit, and 2) the equivalent of "lifting one lead to test" is to just desolder the part,

or, if you have done a lot of this, you *can* lift one lead by getting both joints hot and, well, lifting one side. This is a little difficult to describe, but it's just another one of those SMD techniques that takes a little practice.

George Gingell wrote:

[snip]

> might be able to tell us what happened to Bill Mooney and Blue Rose
> Electronics.

Folks have mentioned this company before, and I never heard of them. I for one would really appreciate it if someone could post the contact info and whether or not they are still around.

[snip]

> One of the most impressive ideas that I ever saw came from him. He gave away
> sample packets with pretinned SMD PCB's and Fallout components for use as
> soldering practice kits. The PCB's were a batch that were made incorrectly
> for a project (Reverse image) and the parts were factory fallouts (Some
> were good, but many were unmarked). For Practice, who cares. I have also
> used re-cycled SMD parts from castoff Consumer Products. The one think that
I can't stress this enough. Get stuff and practice.

> many forget about, is to use the correct solder 37/63 is one of the best.
> I bought a big roll myself. Radio Shack also had some small rolls at one
> time.

Small diameter, low-temperature eutectic solder helps a lot. You can use regular solder, but it's just a little more of a pain.

[snip]

Todd

Todd Nichols KB0HQU Ericsson Inc. (919) 685-2597
nichols@rtp.ericsson.se Research Triangle Park, NC
"Ensign, set a new course. There's coffee in that nebula!" - Capt. Janeway

From qrp-1@lehigh.edu Fri Mar 1 22:31:27 1996
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [4999] Re: todays date
Message-ID: <96Feb29.235235est.57461-14900+39@hooch.CC.Lehigh.EDU>

> Anybody notice that all qrp-1 mail arriving today has
> 01 March as the date?

Charles,

I don't see 01 March anywhere in the Date: or Received:

Subject: [5038] Re: Unbuilt Heath Speaker
Message-ID: <Pine.SUN.3.90.960301130001.2047A-1000000@vortex.sage.dri.edu>

On Fri, 1 Mar 1996, Pat Taber wrote:

> >
> You know, I've always thought there was a cottage industry for bilking kit
> preservationists by selling empty boxes. We could start a company called
> Schrodinger's Kit -- as long as you don't open the box there's a chance that
> there's an unbuilt HW-9 in there.....

>
Geeee, why not call it Schrodinger's Kittens Kits.....that was, when you
open your's and it's empty, that makes mine full, right?

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
...ku7y@sage.dri.edu.....Washoe Lake, Nevada....
...QRP-L #17....ARRL....NorCal #330.....NRA LIFE.....

From qrp-l@lehigh.edu Fri Mar 1 22:31:27 1996
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [5041] Re: www qrp-l
Message-ID: <96Mar1.165252est.57461-11573+36@hooch.CC.Lehigh.EDU>

> Its Friday and the www qrp-l page has not been updated since Wed.
> messages. Any one know whats wrong? I hope they get it fixed soon.

Dennis & Gang,

Yes, there's a bug in there. I'll be working on it but it'll be at least
Monday 'till I can fix it. In the meantime you can browse the daily archive
file, which is accessible via the "Other mail archives" link, or browse the
daily digest at:

<ftp://www.lehigh.edu/pub/listserv/qrp-l/Digests/286>

for example. Or, if you're subscribed to the list and have your mail mode
set to POSTPONE, set it to DIGEST (or ACK) by sending the following command,
in the body of an e-mail, to listserv@Lehigh.EDU:

SET QRP-L MAIL DIGEST

and if you're not subscribed:

SUBSCRIBE QRP-L firstname lastname callsign

SET QRP-L MAIL DIGEST

Very sorry for the inconvenience...

73

Jim N3VXI